User Instruction Manual
Talon™ Self Retracting Lifelines

This manual is intended to meet the Manufacturer's Instructions as required by ANSI Z359.1 and ANSI A10.14, and should be used as part of an employee training program as required by OSHA.

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Figure 1 - Talon Self Retracting Lifeline - 8 ft. Series

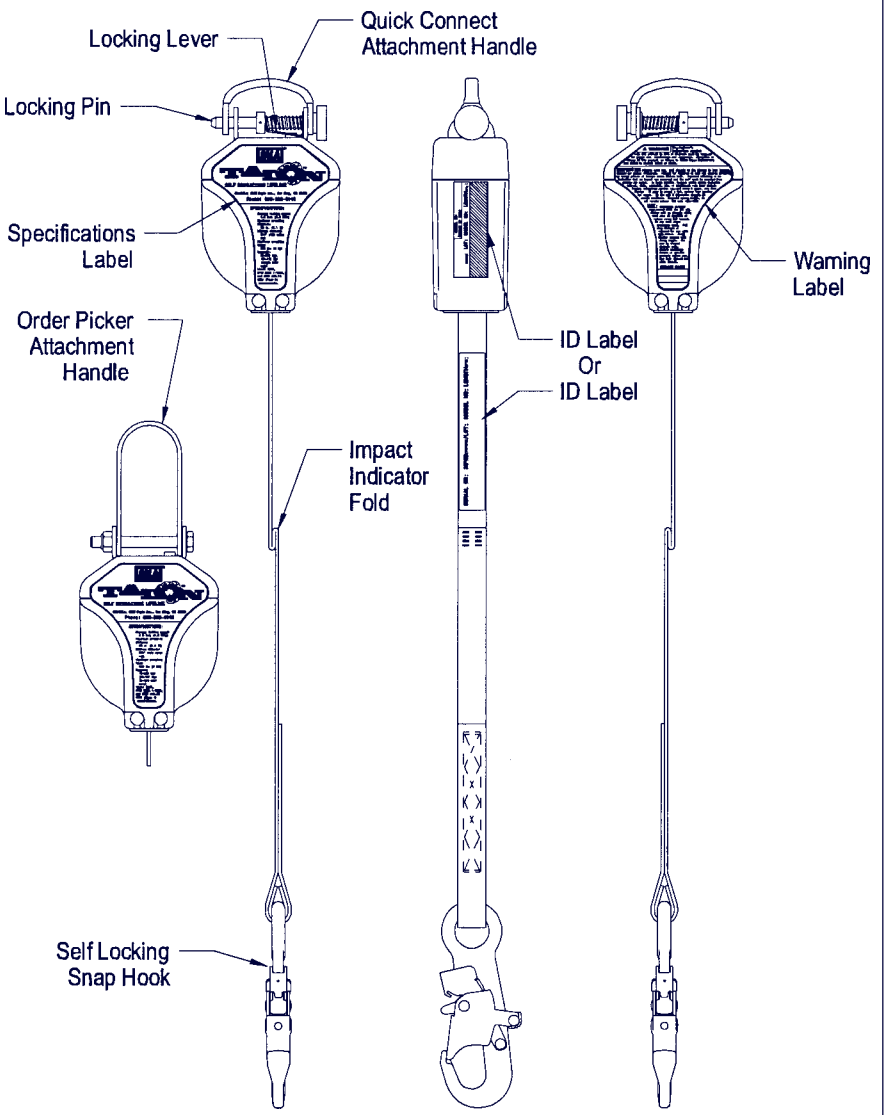
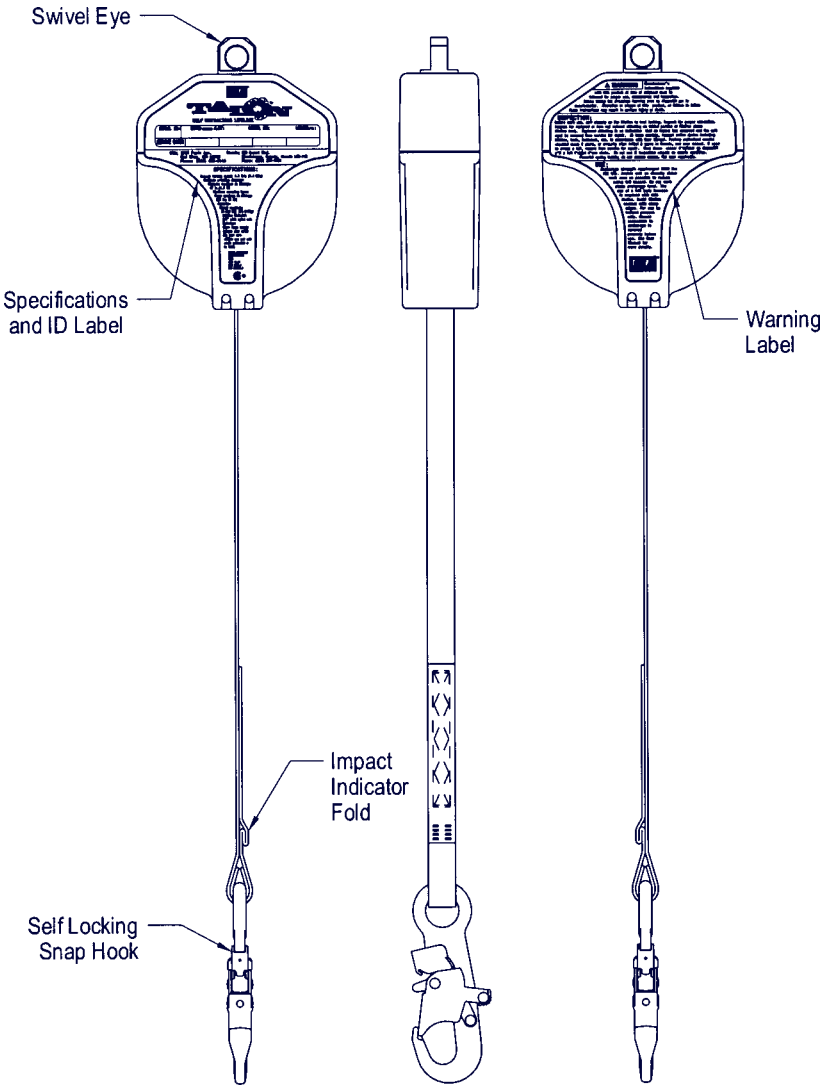


Figure 2 - Talon Self Retracting Lifeline - 16 ft. Series



WARNING: *This product is part of a personal fall arrest system. The user must read and follow the manufacturer's instructions for each component of the system. These instructions must be provided to the user of this product. The user must read and understand these instructions before using this product. Manufacturer's instructions must be followed for proper use and maintenance of this product. Alteration or misuse of this product, or failure to follow instructions may result in serious injury or death.*

IMPORTANT: *If you have questions about the use, care, or suitability of this equipment for your application contact DBI/SALA.*

IMPORTANT: *Before using this equipment record the product identification information from the ID label in the inspection and maintenance log in section 9.0 of this manual.*

DESCRIPTIONS

- **Talon 8 foot Series Self Retracting Lifeline:** See Figure 1. Includes quick connect anchorage attachment handle and 8 foot nylon web lifeline or order picker anchorage attachment handle and 8 foot nylon web lifeline.

- **Talon 16 foot Series Self Retracting Lifeline:** See Figure 2. Includes swivel eye anchorage attachment and 16 foot nylon web lifeline.

1.0 APPLICATIONS

1.1 PURPOSE: DBI/SALA self retracting lifelines (SRL's) are components of a personal fall arrest system (PFAS). These SRL's may be used where worker mobility and fall protection are required.

FALL PROTECTION: The SLR is used as part of a complete personal fall arrest system. Personal fall arrest systems typically include a full body harness, anchorage connector, and SRL.

1.2 LIMITATIONS:

A. PERSONAL FALL ARREST SYSTEM: Personal fall arrest system components used with the SRL must meet the system requirements specified in sections 2.1 and 2.2.

B. ANCHORAGE STRUCTURE: The structure to which the SRL is attached must be selected according to the limitations and strength requirements specified in this manual. See section 2.4 for more information.

C. FALL CLEARANCE: There must be sufficient clearance below the user to arrest a fall before the user strikes the ground or other obstruction. Refer to section 3.2 for more information.

D. CAPACITY: The SRL is designed for use by persons with a combined weight (clothing, tools) of no more than 310 lbs. No more than one person may be connected to the SRL at any time.

E. LOCKING SPEED: Use of the SRL in confined spaces, on slowly shifting material (sand or grain), or on a low pitched roof may not allow sufficient lock-up speed to arrest a fall. A clear fall path is required to safely arrest a fall.

F. NORMAL OPERATION: Normal operation will allow the full length of the lifeline to extend and retract without hesitation or creating a slack line condition as the worker moves at normal speeds. If a fall occurs, a speed sensing brake system will activate, stopping the fall and absorbing much of the energy created. If a fall has been arrested, the SRL must be removed from service and inspected. See section 5.0. Sudden or quick movements should be avoided during normal work operation as this may cause the SRL to lock-up.

G. ENVIRONMENTAL HAZARDS: Use of the SRL in hazardous environments may require additional precautions to reduce the possibility of injury to the user or damage to the personal fall arrest system. Hazards may include, but are not limited to; heat, caustic or corrosive chemicals, high voltage power lines, explosive or toxic gases, moving machinery, sharp edges.

H. TRAINING: The SRL is intended to be installed and used by persons trained in its application and use.

1.3 Refer to national standards, including ANSI Z359.1 and ANSI A10.14, and applicable local, state, and federal (OSHA) requirements governing this equipment for more information on this equipment and associated system components.

2.0 SYSTEM REQUIREMENTS

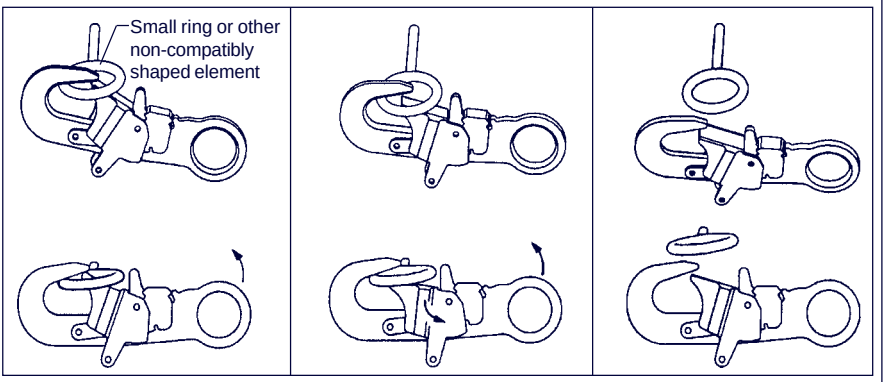
2.1 COMPATIBILITY OF COMPONENTS: DBI/SALA equipment is designed for use with DBI/SALA approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may effect the safety and reliability of the complete system. Personal fall arrest systems must meet applicable local, state, and federal (OSHA) requirements. A full body harness must be used with the Talon SRL.

2.2 COMPATIBILITY OF CONNECTORS: Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Contact DBI/SALA if you have any questions about compatibility.

Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22kN). Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage. See Figure 3. Connectors must be compatible in size, shape, and strength. Self locking snap hooks and carabiners are required by ANSI Z359.1 and OSHA.

Figure 3 - Unintentional Disengagement (Roll-out)

If the connecting element that a snap hook (shown) or carabiner attaches to is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or carabiner. This force may cause the gate (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or carabiner to disengage from the connecting point.



1. Force is applied to the snap hook.
2. The gate presses against the connecting ring.
3. The gate opens allowing the snap hook to slip off.

2.3 MAKING CONNECTIONS: Only use self-locking snap hooks and carabiners with this equipment. Only use connectors that are suitable to each application. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

DBI/SALA connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See Figure 4 for inappropriate connections. DBI/SALA snap hooks and carabiners should not be connected:

A. To a D-ring to which another connector is attached.

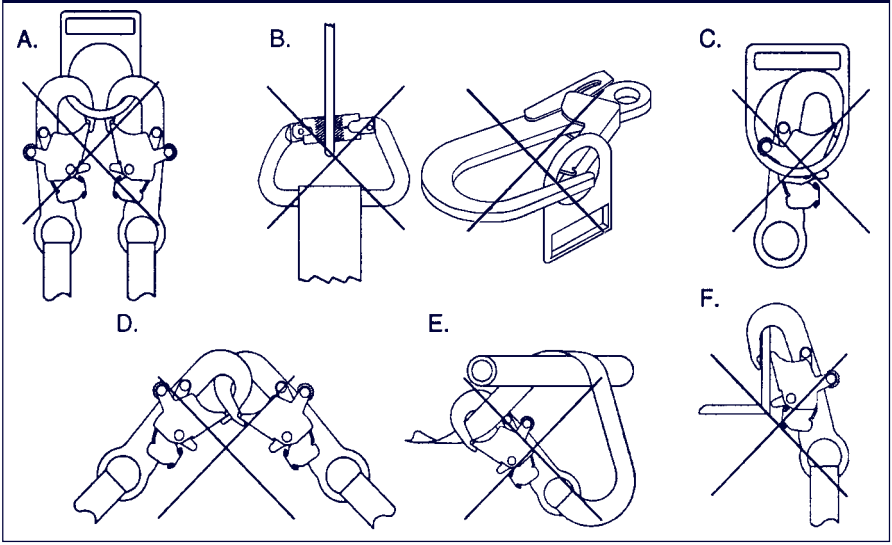
B. In a manner that would result in a load on the gate.

NOTE: *Large throat opening snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook.*

C. In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor and without visual confirmation seems to be fully engaged to the anchor point.

D. To each other.

Figure 4 - Inappropriate Connections



E. Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allow such a connection).

F. To any object which is shaped or dimensioned such that the snap hook or carabiner will not close and lock, or that roll-out could occur.

2.4 ANCHORAGE STRUCTURE: The anchorage to which the SRL is attached must be capable of sustaining static loads in the directions applied by the personal fall arrest system of at least 3,600 lbs. with certification of a qualified person, or 5,000 lbs. without certification. See ANSI Z359.1 for certification requirements. When more than one personal fall arrest system is attached to the same structure, the strength requirements stated above must be multiplied by the number of personal fall arrest systems attached to the structure.

- From OSHA 1910.66 and 1926.500: Anchorages used for attachment of a personal fall arrest system shall be independent of any anchorage being used to support or suspend platforms, and must support at least 5,000 lbs. per user attached, or be designed, installed, and used as part of a complete personal fall arrest system which maintains a safety factor of at least two, and is supervised by a qualified person.

2.5 USING THE SRL WITH A HORIZONTAL SYSTEM: The SRL and horizontal system components must be compatible. Horizontal systems must be designed and installed under the supervision of a qualified person.

3.0 INSTALLATION AND USE

WARNING: *Do not alter or intentionally misuse this equipment. Consult DBI/SALA when using this equipment in combination with components or subsystems other than those described in this manual. Some subsystem and component combinations may interfere with the operation of this equipment. Use caution when using this equipment around moving machinery, electrical hazards, chemical hazards, and sharp edges.*

WARNING: *Consult your doctor if there is reason to doubt your fitness to safely absorb the shock from a fall arrest. Age and fitness can seriously affect your ability to withstand a fall. Pregnant women and minors must not use this equipment.*

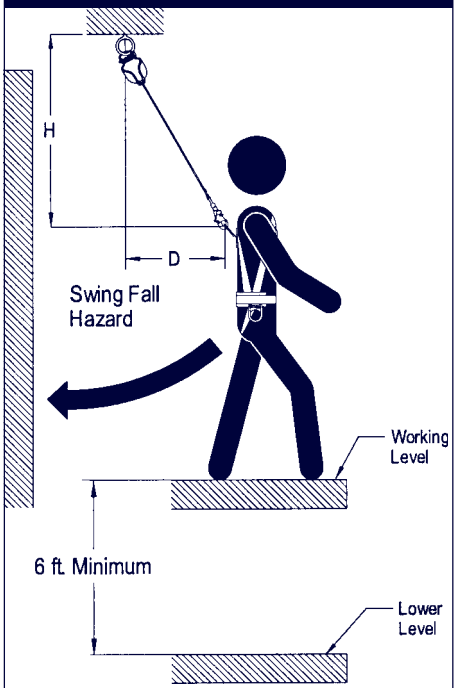
3.1 BEFORE EACH USE: Inspect the SRL according to section 5.0.

3.2 PLAN your personal fall arrest system before installing and using this equipment. Consider all factors affecting your safety during use of this equipment.

A. ANCHORAGE: Select a rigid anchorage point capable of supporting at least 5,000 lbs. See section 2.4. Select an anchorage location that will avoid free fall and swing fall hazards. To prevent an increased free fall distance do not work above the anchorage.

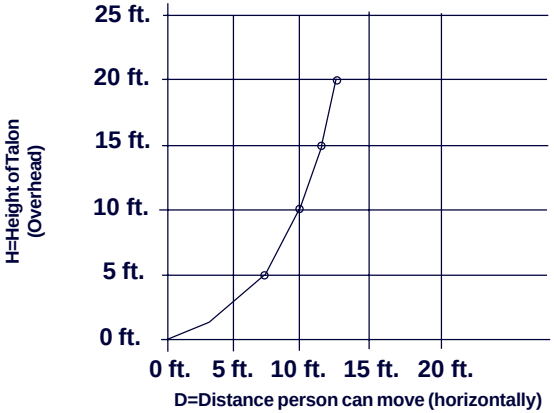
B. FREE FALL: Your personal fall arrest system must be rigged such that the SRL is above your harness attachment element (dorsal D-ring) when in use. Avoid working where your lifeline may cross or tangle with that of another worker. Do not allow the lifeline to pass under your arms or between your feet. Never clamp, knot, or otherwise prevent the lifeline from retracting. Do not allow slack in your lifeline. Do not lengthen the SRL by connecting a lanyard or other component.

Figure 5 - Swing Falls



NOTE: The 6 ft. minimum assumes the fall occurs from a standing position and the SRL is located overhead. If the worker is kneeling or crouching near an edge when a fall occurs, and additional 3 ft. clearance is needed. If the worker is not directly below the SRL, additional clearance is needed.

Chart 1
Working Distance From Anchorage



Example: If the worker is 15 feet directly below the SRL. The recommended work zone is 12 feet in any direction

C. SWING FALLS: Swing falls occur when the anchorage point is not directly above the point where a fall occurs. The force of striking an object in a swing fall may cause serious injury. In a swing fall, the total vertical fall distance will be greater than if the user had fallen directly below the anchorage point, thus increasing the total free fall distance and the area required to safely arrest the user. The SRL will activate regardless of its orientation relative to the user. The recommended work zone represents the typical acceptable work area for most applications. Review your specific application to determine what the appropriate work zone should be. See Chart 1. Minimize swing falls by working as directly below the anchorage point as possible. Never permit a swing fall if injury could occur. If a swing fall situation exists in your application contact DBI/SALA before proceeding. See Figure 5.

D. FALL CLEARANCE: Ensure adequate clearance exists in your fall path to prevent striking an object. A minimum of six feet from the working level to the lower level or nearest obstruction is recommended. See Figure 5.

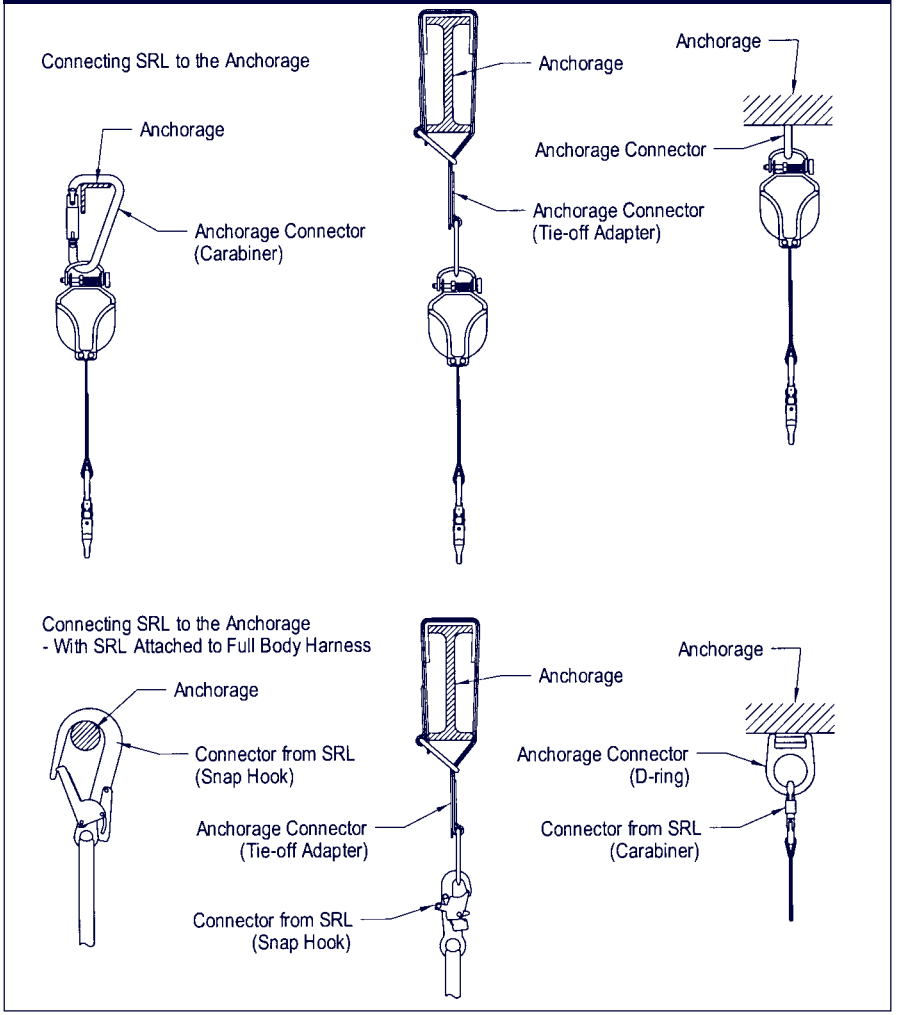
E. SHARP EDGES: Avoid working where the lifeline will be in contact with or abrade against unprotected sharp edges. Provide protection for the lifeline when possible. An energy absorbing component can sometimes be added in-line to further protect the worker. Compatibility and total fall distance must be considered if this is done. Contact DBI/SALA before using an in-line energy absorbing component or lanyard with an SRL.

F. AFTER A FALL: Equipment which has been subjected to fall arrest forces must be removed from service for inspection. See section 5.0.

G. RESCUE: If a fall occurs, the employer must have a rescue plan and the ability to implement a rescue.

3.3 BODY SUPPORT: A full body harness must be used with the SRL. For fall arrest applications connect to the dorsal D-ring on your harness.

Figure 6 - Connecting to the Anchorage

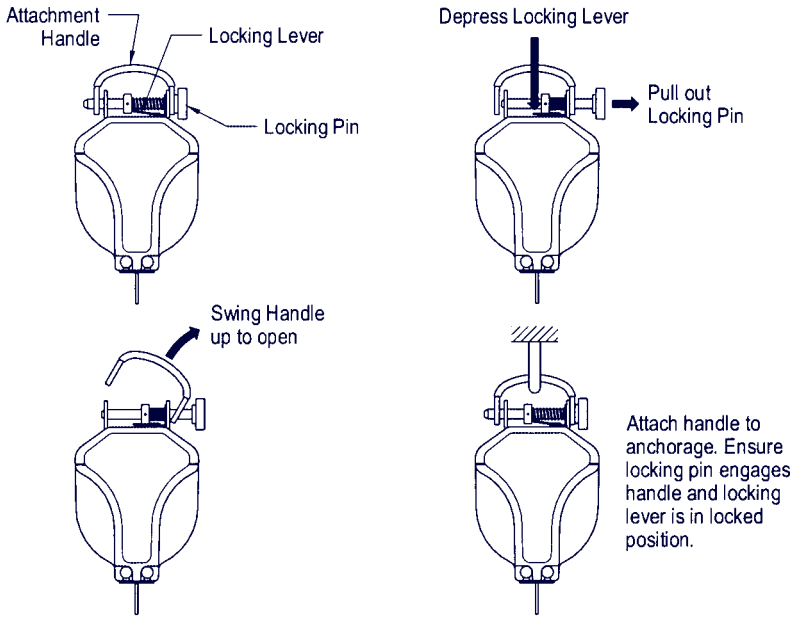


3.4 CONNECTING TO THE ANCHORAGE: When using a hook or carabiner to attach to the anchorage, ensure roll-out cannot occur. See section 2.3. Do not use a hook or carabiner that will not completely close over the anchorage or anchorage connector. See Figure 6. Follow the manufacturer's instructions supplied with each sysytem component.

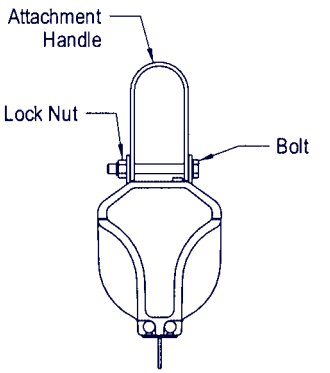
A. QUICK-CONNECT ATTACHMENT HANDLE: See Figure 7. To open the quick-connect attachment handle, depress the locking lever on top of the SRL. Pull the locking pin out to release the handle. Swing the handle up to open. Place the handle around the anchorage or anchorage connector. Swing the handle down and realign the holes. Push the locking pin through the holes.

***WARNING:** Ensure the locking pin fully engages the handle and the locking lever is in the locked position.*

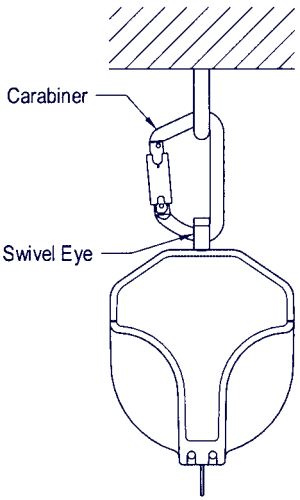
Figure 7 - Using the Attachment Handles and Swivel Eye



Quick Connect Attachment Handle



Order Picker Attachment Handle



Swivel Eye Anchorage Attachment

B. ORDER PICKER ATTACHMENT HANDLE: See Figure 7. Open the order picker attachment handle by removing the bolt and lock nut. Place the handle around the anchorage or anchorage connector. Reinstall the bolt and lock nut. Do not over tighten.

C. SWIVEL EYE: See Figure 7. Attach the SRL to the anchorage or anchorage connector by inserting a carabiner through the swivel eye and around the anchorage or anchorage connector (16 ft. series only).

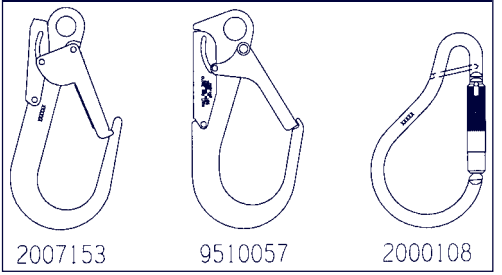
3.5 ATTACHING THE SRL TO A FULL BODY HARNESS: For models including a quick-connect attachment handle only, and to be used with DBI/SALA full body harnesses only. See Figure 8. To attach the SRL directly to a full body harness, pass the quick-connect attachment handle through the same loops as the existing D-ring or connector. Connect the SRL hook or carabiner to a suitable anchorage.

Figure 8 - Attaching SRL to Harness

3.6 USING THE SRL: Connect the SRL to a suitable anchorage. Connect the SRL hook or carabiner to the appropriate connector on your full body harness. Ensure hook or carabiner is closed and locked onto the harness connector.

Note: Do not use the following DBI/SALA hooks and carabiners to connect to your full body harness: 2000108, 2007153, and 9510057. See Figure 9.

Figure 9 - Hooks

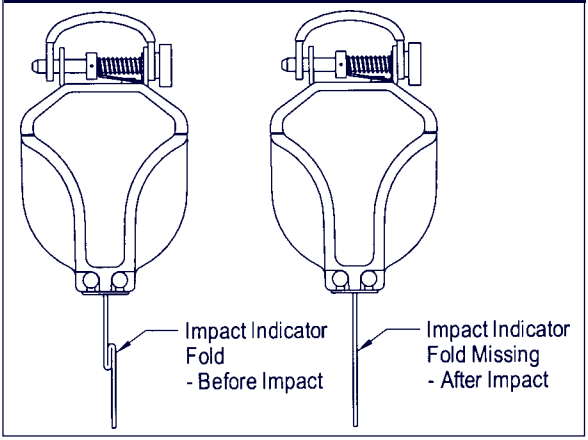


When connected to the SRL the worker is free to move about within the recommended working area. The lifeline should extend and retract without hesitation or creating a slack line condition as the worker moves at normal speeds. If a fall occurs the SRL will lock and arrest the fall. When disconnecting from the SRL keep the lifeline under control as it recoils back into the device. A tag line may be required to extend or retract the lifeline.

3.7 IMPACT INDICATOR: See Figure 10. The SRL incorporates an impact indicator in the lifeline. The lifeline web is folded over and stitched with red thread. The stitched fold will pull out at approximately 450 lbs. If the red stitching is intact the SRL has not been impacted. If the red stitching is broken and the fold torn apart, the SRL has been impacted and must be

removed from service and returned to an authorized service center for repair.

Figure 10 - Impact Indicator



4.0 TRAINING

4.1 It is the responsibility of all users of this equipment to understand these instructions, and to be trained in the correct installation, use, and maintenance of this equipment. These individuals must be aware of the consequences of improper installation or use of this equipment. This user manual is not a substitute for a comprehensive training program. Training must be provided on a periodic basis to ensure proficiency of the users.

WARNING: *Training must be conducted without exposing the trainee to a fall hazard. Training must be repeated on a periodic basis.*

5.0 INSPECTION

5.1 FREQUENCY:

- **Before Each Use:** OSHA 1910.66, OSHA 1926.502 and ANSIZ359.1 requires an inspection of equipment before each use. See sections 5.2, 5.3, and 5.4 for inspection guidelines.

- **Annually:** ANSI Z359.1 requires a formal inspection of the SRL be completed by a competent person other than the user. More frequent inspections by a competent person may be required based on the nature and severity of workplace conditions affecting the equipment and the modes of use and exposure time of the equipment. See sections 5.2, 5.3, and 5.4 for inspection guidelines. Record results in the inspection and maintenance log in section 9.0.
  *NOTE: In Canada, CSA requires SRLs to be serviced within two years of the manufactured date, and annually thereafter.

- **After a Fall Arrest:** Inspect impact indicator according to section 5.2, and the entire SRL according to sections 5.3 and 5.4.

5.2 IMPACT INDICATOR: To inspect the impact indicator, find the fold in the lifeline stitched with red thread, as shown in Figure 10. If the red stitching is broken and the fold torn apart, the SRL has been impacted and must be removed from service and returned to an authorized service center for repair. Do not restitch the fold.

WARNING: *If the SRL has been subjected to fall arrest or impact forces it must be removed from service and returned to an authorized service center for repair.*

5.3 INSPECTION STEPS:

Step 1. Check for loose screws and bent or damaged parts.

Step 2. Check the housing for distortion, cracks, or other damage. Ensure the anchorage point is not damaged or distorted.

Step 3. The lifeline must fully extend and retract smoothly with no hesitation or slack line condition.

Step 4. Ensure the device locks when the lifeline is pulled sharply. Lock-up should be positive, with no slipping.

Step 5. All labels must be present and fully legible.

Step 6. Check for corrosion on the entire unit.

Step 7. Check the lifeline for cuts, burns, chemical damage, or severely abraded areas. The lifeline must not be damaged.

Step 8. Check the connecting hooks or carabiners for damage, distortion, or corrosion, and working condition.

Step 9. Inspect each component of the personal fall arrest system according to manufacturer's instructions.

Step 10. Record the inspection results in the inspection and maintenance log in section 9.0.

5.4 If the inspection reveals an unsafe or defective condition, remove the SRL from service and contact an authorized service center for repair.

NOTE: *Only DBI/SALA or parties authorized in writing may make repairs to this equipment.*

6.0 MAINTENANCE, SERVICING, AND STORAGE

6.1 MAINTENANCE:

A. HOUSING: Periodically clean the exterior of the SRL with water and a mild detergent. Position the SRL so water can drain out. Clean labels as required.

B. LIFELINE: Clean the lifeline with water and a mild detergent. Rinse and thoroughly air dry. Do not force dry with heat. An excessive build-up of dirt or other contaminants may prevent the lifeline from fully retracting, causing a potential free fall hazard. Return the SRL to an authorized service center for lifeline replacement if necessary.

C. PERSONAL FALL ARREST SYSTEM COMPONENTS: Clean and store associated system components according to manufacturer's instructions.

6.2 SERVICING: Do not disassemble the SRL. Do not lubricate any part of the SRL. Additional maintenance and servicing must be performed by an authorized service center. A return authorization number must be issued by DBI/SALA. See section 5.1 for servicing frequency.

6.3 STORAGE: Store the SRL in a cool, dry, and clean environment, out of direct sunlight. Avoid storing the SRL in areas where chemical vapors exist. Thoroughly inspect the SRL after extended storage.

7.0 SPECIFICATIONS

7.1 PERFORMANCE SPECIFICATIONS:

- **Capacity (All Models):** 75 - 310 lbs., one user only
- **Working Range, 8 Foot Models:** 2.5 ft. to 8 feet
- **Working Range, 16 Foot Models:** 1.5 ft. to 16 feet
- **Maximum Arresting Force (All Models):** 900 lbs. when tested in accordance with ANSI Z359.1.
- **Average Locking Speed (All Models):** 4.5 ft./second
- **Maximum Arresting Distance (All Models):** 42 inches

7.2 PHYSICAL SPECIFICATIONS:

8 Foot Models:

- **Overall Dimensions, Quick-Connect Attachment Handle Models (LxWxH):** 6.7 x 3.9 x 2.2 inches
- **Overall Dimensions, Order Picker Attachment Handle Models (LxWxH):** 8.9 x 3.9 x 2.2 inches

16 Foot Models:

- **Overall Dimensions (LxWxH):** 7.9 x 5.9 x 2.4 inches

ALL MODELS:

- **Materials:**

  Housing: Nylon
  Cable Drum: Glass filled nylon
  Internal Components: Steel/Aluminum
  Lifeline: 3/4 inch nylon web

7.3 PATENTS AND REQUIREMENTS:

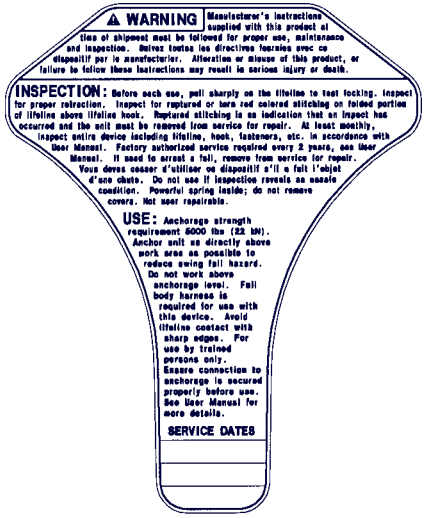
- **Patents Pending**
- **Meets ANSI Z359.1, ANSI A10.14, and OSHA requirements**

8.0 LABELING

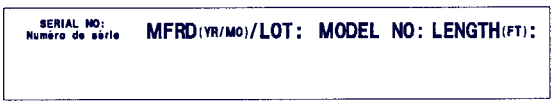
8.1 The following labels must be present and fully legible:

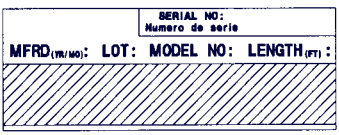
8 Foot Series SRL:

Specifications Label



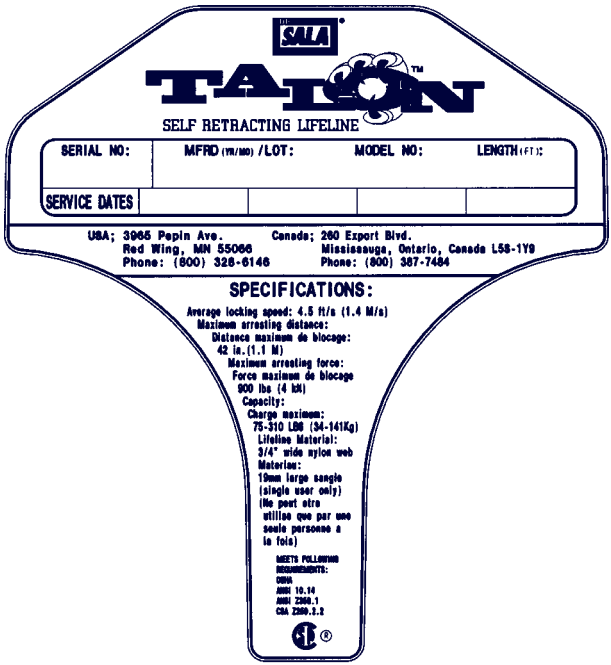
Warning Label



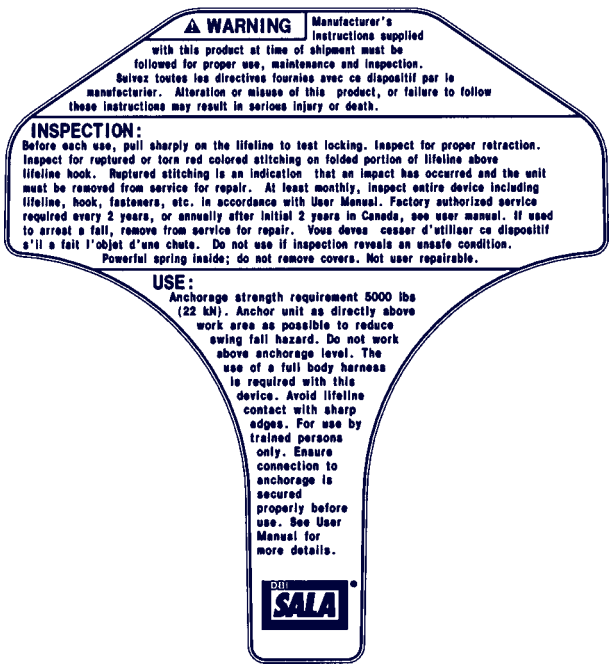


ID Label on Lifeline or ID Label on housing

16 Foot Series SRL:



Specifications Label



Warning Label

9.0 INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER: _____

MODEL NUMBER: _____

DATE PURCHASED: _____

INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			

9.0 INSPECTION AND MAINTENANCE LOG

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MODEL NUMBER: _____

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INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED
Approved By:			
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WARRANTY

Self Retracting Lifelines offered by DBI/SALA are warranted against factory defects in workmanship and materials for a period of two years from date of purchase. Upon notice in writing, DBI/SALA will promptly repair or replace all defective items. DBI/SALA reserves the right to have any defective item returned to it's plant for inspection before making a repair or replacement. Warranty does not cover equipment damages resulting from abuse, damage in transit, or other damage beyond the control of DBI/SALA. This warranty applies only to the original purchaser and is the only one applicable to our products, and is in lieu of all other warranties, expressed or implied.

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Fax: (905) 795-8777

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